

Icom Green Procurement Standard Sixth version

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Icom Inc.

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Introduction

Pursuing the Sustainable Development Goals (SDGs), which was adopted at the UN summit in September 2015, is gaining increasing recognition worldwide.

The Icom group, in every phase of its operation, takes into account the "conservation of the global environment" and the "protection of human health," well recognizing that these issues are common to all humankind.

As part of such efforts, we contribute to the efficient use of resources while opting for environmentally friendly parts and materials in line with the group's management philosophy, which aims to "leverage communication to create a bright future and amusing technology."

In particular, the international community is increasingly concerned about the environmental impact of chemical substances in products, with relevant regulations and social requirements becoming stringent at home and abroad. EU directives and regulations are one such example.

The Icom Group is committed to providing socially useful, safe products by properly managing chemical substances according to the "Icom Green Procurement Standards," which control chemical substances in parts and materials. The sixth version of the standards, meanwhile, has recently been issued, with developments in relevant regulations and social requirements incorporated.

We therefore appreciate your understanding our environmental approaches and activities, and would like to solicit your further cooperation.

January 2022 Icom Incorporated

1. Purpose

The Icom Green Procurement Standards set out requirements and procedures to be observed by parts and material suppliers.

2. Scope

The standards apply to all items procured by the Icom Group for the manufacturing of its products. Specifically, they include the following:

1) Parts and assemblies Electronic parts, mechanical parts, units, etc.

2) Materials and consumables Solder, adhesive, ink, etc.

3) Completed articles Products delivered by suppliers and shipped

as is without being processed or machined, such as speaker-microphones, AC adaptors, batteries, antennas, cables and optional

accessories.

4) Packaging and packing materials Materials used for packing/packaging of Icom

products, such as cardboard boxes, individual packing boxes, plastic bags, cushioning materials, labels, stickers and

fliers.

The items mentioned above 1) to 4) are collectively called "parts and materials."

* Reference

Phthalates that have recently been added to the RoHS Directive are volatile and migrate into other controlled substances upon contact, posing risks in their management.

* Note

When producing the items mentioned above 1) to 4), they may be contaminated or mixed with controlled substances through the use of tools and returnable containers, which is not the case with the parts and materials included in the scope. Items such as tools and returnable containers, however, should be properly handled and managed.

Example:

- Shared use of cleaning tools contaminated lead-free solder, with lead-based solder migrating into it.
- Plastic returnable containers in direct contact with parts and materials caused contamination as they contained phthalates exceeding the standard limit.

3. Terms and definitions

Terms used in the standards are defined as follows:

1) IEC 62474

The International Electrotechnical Commission (IEC) is an international standardization organization consisting of national electric committees (IEC national committees).

The international standard IEC 62474 sets out the "Material Declaration for Products of and for the Electrotechnical Industry."

Referring to relevant national laws and regulations (the RoHS Directive, the REACH Regulation, etc.), moreover, IEC 62474 screens for banned substances and those to be reported, providing a controlled chemical substance database exclusively for electric/electronic products and industries. Being a manufacturer of electric/electronic products, the Icom Group controls the chemical substances specified in this database.

2) chemSHERPA

The communication tool "chemSHERPA," developed primarily by the Ministry of Economy, Trade and Industry, is designed to standardize communication of chemical substances in products. It is compatible with the IEC 62474 database and equipped with a conversion function for AIS and JGP files previously developed and used by industry groups, with these files standardized for integration with the tool.

Version 2.03 and beyond, however, are not equipped with the conversion function while Version 2.02, which supports it, will expire on August 31, 2022.

The chemSHERPA consists of the chemSHERPA-CI for upstream chemical manufacturers (liquid, powder, raw materials, etc.) and the chemSHERPA-AI for mid-stream and downstream molding manufacturers (assemblies, processed goods, completed articles, etc.).

The chemSHERPA page on the website of the Ministry of Economy, Trade and Industry features video learning tools, which can also be accessed through the chemSHERPA official website. These tools are administered by the Joint Article Management Promotion-consortium (JAMP).

The Joint Article Management Promotion-consortium (JAMP) The Joint Article Management Promotion-consortium (JAMP) manages information on chemical substances contained in articles (parts, moldings, etc.) while designing and promoting a smooth disclosure and communication system within the supply chain. Its services include: designing and promoting Guidelines for the management of chemicals in products; promoting the chemSHERPA; maintaining and improving chemSHERPA development tools; and keeping track of developments in relevant regulations and standards to update the standards and lists of controlled substance.

4) Conflict minerals

As minerals mined in the Democratic Republic of Congo (DRC) and its nine neighboring countries are suspected of financing armed groups abusing human rights and destroying the environment, provisions were established in July 2010 in relation to the US Financial Regulatory Reform (Dodd-Franck Act).

These provisions apply to tantalum, tin, tungsten and gold, also referred to as 3TG. The US listed companies shall disclose every year their use of conflict minerals for their manufacturing, making sure that they are not financing armed groups.

Surveys on 3TG in this particular case are referred to as "conflict mineral surveys."

JIS Z 7201:2017 (Management of Chemicals in Products – Principles and Guidelines)

The JIS Z 7201:2017, the Japanese industrial standards for management of chemical substances in products, is based on the knowledge and expertise of a number of manufacturers involved in the supply chain, from upstream to downstream.

Organizational efforts to proactively manage such chemical substances according to the principles and guidelines of the JIS Z 7201:2017 make the whole procedure more efficient and foolproof, which in turn contributes to protecting human health and the environment.

The standards established in 2012, meanwhile, were revised in response to changes and challenges in the supply chain, specifically in the management of chemical substances in products.

6) Guidelines for the management of chemicals in products

These guidelines designed for the entire supply chain aim to manage chemical substances in products in an efficient and foolproof manner, setting out general requirements to be observed. They also help organizations involved in the supply chain better manage chemical substances in products and have access to relevant reliable information.

In addition, they are compliant with the JIS Z 7201:2017, with the fourth version issued on May 31, 2018.

Issued by: JAMP

Threshold levels

They refer to maximum tolerable concentrations of controlled substances. For example, the RoHS threshold for lead (Pb), a banned substance, is set at 1,000 ppm (=0.1 wt%); Pb concentrations below 1,000 ppm can be tolerated.

8) Homogeneous material

A homogeneous material refers to a material that can be mechanically separated into different materials and is of uniform composition throughout. For example, a wire product with pre-applied solder consists of three homogeneous materials: coating, copper wire and solder.

9) Exemption

The RoHS Directive provides exemptions for controlled substances designed for specific use where deviations from standard threshold levels are tolerated. The conditions for use of such controlled substances are referred to as "exempted items."

For example, a maximum lead (Pb) concentration of 40,000 ppm (=4.0 wt%) is tolerated for copper alloy.

10) Volatility and migrating properties

Four phthalates that were added to the RoHS Directive in July 2019 as controlled substances are considered to pose risks in their management.

Phthalates can seep out of the surface of organic substances (resins, etc.) containing these compounds and subsequently migrate into other organic substances upon contact. The JAMP provides a guidance on this issue.

4. Controlled substances

The Icom Group manages chemical substances in products according to the "Guidelines for the management of chemicals in products (Ver. 4.0)," provided by the JAMP, and uses chemSHERPA to communicate relevant substances, with controlled substances designated in compliance with IEC 62474 database.

Reference Material 1 (Icom Controlled Substance List) and Reference Material 2 (Icom Exempted Substance List) show controlled substances.

- Reference Material 1 (Icom Controlled Substance List)
 The list is based on IC02 included in the controlled substance list, which is available on the IEC 62474 website, and in the chemSHERPA managed substance list, which is available on the chemSHERPA website.
 A chemSHERPA file that meets the requirements of the Icom Controlled Substance List can be prepared by selecting "IC02" in the substance search box when entering ingredient information.
- Reference Material 2 (Icom Exempted Substance List)
 The list includes substances for which deviations from standard threshold levels are tolerated; they are exempted by the RoHS Directive.
 Specified concentrations of controlled substances in Reference Material 1 are tolerated, provided that intended uses are included in Reference Material 2.
 Tolerable threshold levels, as shown in Reference Material 2, differ depending on controlled substances and their intended uses.
- * Follow relevant laws and regulations if their descriptions or interpretations differ from those of the controlled substances of the Icom Group.

5. Requests for suppliers

- 5.1 Building a management system for chemical substances in products Suppliers are requested to build a monitoring/management system for chemical substances in parts and materials delivered to the Icom Group.

 Specific procedures include: gathering and verifying information on chemical substances in parts and materials provided by upstream manufacturers (upstream process); manufacturing products from those parts and materials through processes in which relevant substances are properly managed; and establishing a system consisting of supply chains that communicate accurate information.
 - * Refer to the "Guidelines for the management of chemicals in products (Ver. 4.0)," provided by the JAMP, when designing a management system for chemical substances in products.

Suppliers may be requested to present documents relevant to their management systems and have their plants audited on site to ensure their conformity to the Icom Controlled Substance List.

5.2 Requests for survey documents on chemical substances in products Suppliers are requested to submit survey documents on chemical substances in parts and materials delivered to the Icom Group.

Specifically, they should be submitted according to the following:

- Parts and materials purchased or to be purchased:
 Upon submission of the first samples
- Parts and materials subject to changes in 4M:
 Upon notification of changes in 4M
- * Parts and materials to be surveyed individually are subject to notification and consultation, including submission deadlines.

Refer to 5.2.1, 5.2.2 and 5.2.3 below for details about survey documents to be submitted.

5.2.1 Submission of survey documents using chemSHERPA tools Suppliers are requested to prepare and submit survey documents on parts and materials delivered to the Icom Group, using chemSHERPA tools. Survey documents prepared using chemSHERPA tools will be checked depending on their versions and inputs for which we solicit your cooperation. 5.2.2 Submission of documents for conforming regulations and standards With respect to parts and materials to be delivered, suppliers are requested to submit documents (delivery specifications, etc.) that stipulate regulations and standards whose conformity has been confirmed before delivery.

Reporting example:

- Conforming to the chemSHERPA files submitted
- Conforming to supplier's procurement standards (Ver.XX)
- Conforming to the RoHS Directive and Regulation
- * A description or an expression to the effect that "conforming to relevant laws and regulations" (such as the RoHA Directive and the REACH Regulation) shall be construed as conformity as of the date on which delivery specifications are exchanged.
- 5.2.3 Submission of information (on conflict mineral surveys, etc.) to be requested individually

Suppliers may be requested to individually submit information on conflict mineral surveys, etc. in addition to the list of chemical substances used in parts and materials (see Section 5.2.1 and 5.2.2).

- * The survey documents shall be submitted only when requested individually.
- 5.3 Submission of relevant information upon detection of any controlled substances Suppliers are requested to submit relevant information upon detection of any controlled substances in parts and materials delivered to the Icom Group only when their threshold levels exceed standards.

How the parts and materials are treated and disposed of shall be discussed case by case.

5.4 Submission of information on additional controlled substances regulated under revised laws and regulations

Suppliers are requested to submit information on additional substances regulated under revised laws and regulations if they are contained in parts and materials delivered regardless of their registration in the Icom Controlled Substance List. Example:

Part A delivered to the Icom Group contains PIP (3:1), which is regulated under the TSCA (revised in 2021).

6. Inquiries about the Icom Green Procurement Standards
For any questions about the standards, please contact the following:
Materials Department, Icom Inc.

Tel.: 06-6794-7777

Documents and references related to Icom Green Procurement are available from our website: Japanese https://www.icom.co.jp/corporate/effort/green/ Global https://www.icomjapan.com/company/green/ Icom Green Procurement Standard Sixth Version JANUARY 2022 Issued by Icom Inc.